

VICOUNT DIGITAL OPERATING INSTRUCTIONS

Please read these instructions fully prior to operating the smoke generator

GENERAL SPECIFICATION (approx.)

Vicount	1300/1.1kw	1300/2.2kw	5000/1.1kw	5000/2.2kw
Weight	26 lbs (12kg)	28 lbs (13kg)	37 lbs (17kg)	39 lbs (18kg)
Usable fluid capacity	2.75 pts (1300ml)	2.75 pts (1300ml)	10.14 pts (4800ml)	10.14 pts (4800ml)
Maximum working pressure	120 psi (8.2bar)	80 psi (5.5bar)	120 psi (8.2bar)	80 psi (5.5bar)
Optimum working pressure	100 psi (6.9bar)	70 psi (4.8bar)	100 psi (6.9bar)	70 psi (4.8bar)
Duration at max. output	40 mins	21 mins	145 mins	80 mins
Electrical supply	120v, 11A, 50/60hz 230v, 5A, 60hz	120v, 20A, 50/60hz 230v, 10A, 60hz	120v, 11A, 50/60hz 230v, 5A, 60hz	120v, 20A, 50/60hz 230v, 10A, 60hz

GENERAL INFORMATION

1. Use only CO₂ or Nitrogen as propellant gas. Do not use siphon CO₂ cylinders. **NEVER USE COMPRESSED AIR.**
2. Depending on the generator model, use only CORONA SMOKE FLUID 135 for smoke resistant to 135°C, and SMOKE FLUID 180 for up to 180°C.
3. Always keep the smoke generator upright. **Only operate the machine if upright and on a level surface.**
4. When smoke is to be ducted, always use an appropriate CORONA Ducting Adapter.
5. Use in well ventilated areas only. If used in confined spaces consult the gas supplier.
6. Ensure that the CO₂ or Nitrogen hose is kept kink free and that the cylinder is properly restrained. Keep flames and sparks away from cylinder and hoses.

PREPARATION

1. Use the correct fluid. Ensure that the reservoir contains fluid by checking sightglass. **DO NOT OVERFILL beyond the maximum level shown on the sightglass.** Replace the filler cap.
2. Check for sufficient inert gas supply: fit the regulator to the cylinder using the CO₂ or Nitrogen gas adapter if needed; set the pressure adjusting knob to zero, and open up the stop valve on the cylinder. The cylinder gas pressure will now be displayed. A minimum of 400 psi (27 bar) is recommended.
3. Connect gas line to regulator.
4. Make sure all switches are in the OFF (0) position.

DUCTING

Use a CORONA Ducting Adapter to duct smoke. Do not connect a duct or hose directly to the generator and ensure that the air holes in the spout of the generator are not obstructed in any way. For a permanent installation the use of centrifugal blowers is recommended. The spacing between the fan and the generator is very important - Consult CORONA. For fan operation, a switched output is fitted to the front of the generator.

OPERATION

1. Connect the generator to a suitable power supply. Put the RED power to ON (1). The red indicator in the switch and the Digital Display will light up, indicating that the generator is powering up.
2. After 3-4 minutes the Ready Indicator will light up. For best results wait a further 10 minutes.
3. Connect the gas line to the generator, setting the output pressure on the regulator to 60 psi (4 bar).

4. To produce smoke push the BLACK smoke switch to ON (1). Alternatively if the Remote is used, leave the smoke switch OFF, connect the plug on the remote control lead to the socket on the back panel and activate the toggle switch at the end of the remote line.
5. Smoke volume can be varied by adjusting the gas pressure using the regulator valve. **Do not exceed the Maximum Working Pressure as noted for the specific unit under General Specification above.**
6. When smoke is no longer required, put the smoke switch (or remote toggle) to OFF (0). The gas in the reservoir tank will now be exhausted through the heat exchanger, clearing it of fluid deposit. Smoke production ceases within a few seconds.
7. SHUT DOWN: When the generator is no longer required, close the cylinder stop valve. Turn the POWER switch to OFF (0).

THERMAL CUT OUT

All CORONA Smoke Generators are fitted with a Thermal Cut Out. If the generator overheats for any reason the Thermal Cut Out will trip, cutting off all power to the heater and the DIGITAL MODULE.

ROUTINE MAINTENANCE

1. The Vicount incorporates a purging function when the fluid tank is de-pressurized minimizing the build up of carbon in the heat exchanger.
2. It is recommended that the nozzle of the heat exchanger be cleaned regularly, using the 0.08" (2mm) hand held twist drill to a depth of 1" (25mm). Under heavy use this should be done on a weekly basis. This process should only be carried out when the generator is cold.
3. Every 6 months, remove the side panels from the generator, check all compression joints for tightness, and wipe away any excess fluid.
4. Every 12 months the fluid reservoir should be drained, using the plug on the unit's under side.
5. Only use CORONA SMOKE FLUID. Use of other chemicals will void any warranties and may be hazardous.

INSTALLATION

Consult CORONA before configuring the generator to interface with PLC's or Remote Consoles.

HEALTH AND SAFETY

The smoke produced by all CORONA Smoke Generators has been rigorously tested to ensure that it is non-toxic under normal circumstances. However, it is recommended that persons who are asthmatic or

suffering from a respiratory complaint should not be subjected to dense smoke concentrations. We recommend that breathing apparatus be worn upon prolonged exposure to the smoke.

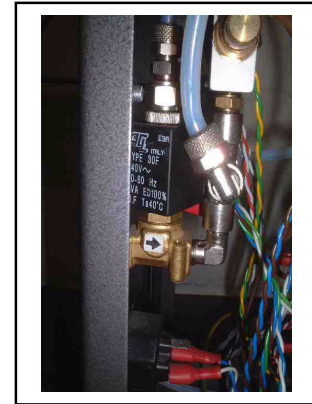
WARNING

CORONA does not accept responsibility for any damage or malfunction to or by CORONA Smoke Machines, or for any consequential damage

TROUBLE SHOOTING

Apply solutions in sequence and only proceed with the next step if necessary

Problem	Solution
Smoke volume poor maximum	<ul style="list-style-type: none"> a Check CO₂ or Nitrogen pressure / supply and adjust to b Check fluid level and top up as necessary c Clean nozzle of heat exchanger d Remove cover; remove transfer tube, clean with wire, and replace
Fog thin and blue	<ul style="list-style-type: none"> a Check fluid level and top up as necessary b Clean nozzle of heat exchanger c Turn metering valve screw* clockwise
Fog dense but wet	<ul style="list-style-type: none"> a Generator overfilled. Drain away excess fluid and re-test b Turn metering valve screw* anticlockwise
No power at generator	<ul style="list-style-type: none"> a. Disconnect from power. Remove the right hand side panel (as viewed from the rear). Press Thermal Cut Out - the red rubber button on top of heat exchanger. Reconnect power. Monitor generator temperature. If temperature stabilizes below 421°C on warm up, continue operation. If Thermal Cut Out is tripped again, contact CORONA. b Check fuse and replace if necessary. If fuse blows again, consult CORONA.



* The metering valve screw is the brass-colored screw shown in the top right-hand corner of the picture (above). This screw is accessible by removing the right side panel (as viewed from the rear). Always tighten the locknut after adjustments have been made. DO NOT FULLY CLOSE THE VALVE.

Please contact Corona prior to shipping any equipment for servicing or repair.



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